NOVEMBER/DECEMBER 2024

23PMB12 — IMMUNOLOGY, IMMUNOMICS AND MICROBIAL GENETICS

Time: Three hours

Maximum: 75 marks

SECTION A — $(10 \times 2 = 20 \text{ marks})$

Answer ALL questions.

- 1. Define Antigenicity.
- 2. What is Innate Immunity?
- 3. Explain TCR.
- 1. Define Immunoglobuin.
- 5. What is meant by Adjuvants?
- 6. Expand SRID and ODD.
- 7. What is meant by telomere?
- 8. Define Centromere.
- 9. Mention the two types of transduction.
- 10. Define Gene transfer mechanism.



SECTION B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL questions.

11. (a) Write down the detailed note on MHC molecules.

Or

- (b) Explain in detail about Acquired Immunity.
- 12. (a) Explain in detail about alternative pathway of complement system.

Or

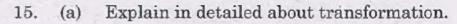
- (b) Give an account on Theories of antibody production.
- 13. (a) Describe in detail about Type 1
 Hypersensitivity.

Or

- (b) Explain in detail about the working procedure and types of ELISA.
- 14. (a) Give an account on Methylation, Acetylation and Phosphorylation.

Or

(b) Write about the Eukaryotic genome structure.





Give an account on Conjugation.

SECTION C — $(3 \times 10 = 30 \text{ marks})$

Answer any THREE questions.

- 16. Give detailed account on cells of the immune system with sketch.
- 17. Write down the production and application of Monoclonal and polyclonal antibodies.
- 18. Write about the types of Immunoelectrophoresis with neat diagram.
- 19. Write an elaborate account on Prokaryotic genome structure.
- 20. Describe in detail about mechanism and types of transposition reactions.